

IN THE CLAIMS:

Please cancel claims 12-23.

1.(Withdrawn). The method of manufacturing an adhesive bonded sintered plate, comprising the steps of

- cleaning metal cores of irregularities;
  - roughening a surface of said metal cores to prepare said metal cores for bonding;
  - applying thermosetting adhesive layers to said metal cores;
  - applying sintered linings to said thermosetting adhesive layers;
  - bonding said sintered lining to said thermosetting adhesive layers; and
- said metal cores at a bonding pressure, bonding temperature and a bonding time.

2. (Withdrawn) The method of claim 1, wherein said thermosetting adhesive is a phenolic thermosetting adhesive.

3. (Withdrawn) The method of claim 1, wherein said thermosetting adhesive is an epoxy thermosetting adhesive.

4. (Withdrawn) The method of claim 1, wherein said metal cores are fabricated from aluminum.

5 (Withdrawn) The method of claim 1, wherein said bonding pressure is in the range of 25 to 1000 psi.

6 (Withdrawn) The method of claim 1, wherein said bonding temperature is in the range of 375 degrees Fahrenheit to 475 degrees Fahrenheit.

7. (Withdrawn) The method of claim 1, wherein said bonding time is at least 30 seconds.

8. (Withdrawn). The method of manufacturing an adhesive bonded sintered plate, comprising the steps of

- cleaning metal cores of irregularities;
- roughening a surface of said metal cores to prepare said metal cores for bonding;
- applying thermosetting adhesive layers to said metal cores;
- applying sintered linings to said thermosetting adhesive layers;
- bonding said sintered linings to said thermosetting adhesive layers and said metal cores at a bonding pressure, bonding temperature and a bonding time, wherein

- a. said bonding pressure is in the range of 25 to 1000 psi;
  - b. said bonding temperature is in the range of 375 degrees
  - c. said bonding time is at least 30 seconds.
9. (Withdrawn) The method of claim 8, wherein said thermosetting adhesive is a phenolic thermosetting adhesive.
- 10 (Withdrawn) The method of claim 8, wherein said thermosetting adhesive is an epoxy thermosetting adhesive.
11. (Withdrawn) The method of claim 8, wherein said metal cores are fabricated from aluminum.
12. (Canceled)
13. (Canceled)
14. (Canceled)
15. (Canceled)
16. (Canceled)
17. (Canceled)
18. (Canceled)
19. (Canceled)
20. (Canceled)
21. (Canceled)
22. (Canceled)
23. (Canceled)
24. (New) A method for making sintered plates comprising:
  - providing a metal core of a first thickness having a top surface and a bottom surface;
  - cleaning the entire top surface;
  - roughening the entire top surface;
  - providing a thermosetting top adhesive layer of a second thickness over the entire roughened top surface;
  - placing a sintered top metal lining of a third thickness over the entire top adhesive layer;
  - bonding the top metal lining to the metal core via the top adhesive layer under a pressure of around 25 to around 1000 psi and a temperature of around 374 to 475 degrees

Fahrenheit for greater than approximately thirty seconds to activate the thermosetting top adhesive layer.

25.(New) The method of claim 24 further comprising the steps of:

- cleaning the entire bottom surface;
- roughening the entire bottom surface;
- providing a thermosetting bottom adhesive layer substantially equal to the second thickness over the entire roughened bottom surface;
- placing a sintered bottom metal lining substantially equal to the third thickness over the entire bottom adhesive layer;
- bonding the bottom metal lining to the metal core via the bottom adhesive layer under a pressure of around 25 to around 1000 psi and a temperature of around 374 to 475 degrees Fahrenheit for greater than approximately thirty seconds to activate the thermosetting bottom adhesive layer.

26.(New) The method of claim 25 wherein the top metal lining and the bottom metal lining have a different composition.

27. (New) An adhesive bonded sintered plate comprising:

- a metal core of a first thickness, the metal core having a top surface, a bottom surface, and a melting temperature not substantially greater than 1220 degrees Fahrenheit;

- a top adhesive layer of a second thickness, the top adhesive layer covering the entire top surface;

- a top metal lining of a third thickness covering the entire top adhesive layer;

wherein the core is attached to the top metal lining via the top adhesive layer.

28.(New) The adhesive bonded sintered plate of claim 27 further comprising:

- a bottom adhesive layer on the bottom surface, the bottom adhesive layer substantially equal to the second thickness;

- a bottom metal lining substantially equal to the third thickness;

wherein the core is attached to the bottom metal lining via the bottom adhesive layer.

29. (New) The sintered plate of claim 28 wherein the top metal lining and bottom metal lining have a different composition.